



U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: RTCA DOCUMENT DO-160D

Date: 7/21/98

Initiated By: AIR-130

AC No: 21-16D

Change:

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1. **PURPOSE.** This advisory circular calls attention to RTCA, Inc (formerly Radio Technical Commission for Aeronautics) Document No. DO-160D, "Environmental Conditions and Test Procedures for Airborne Equipment," dated July 29, 1997, and discusses how the document may be used in showing compliance with airworthiness requirements.
 2. **CANCELLATION.** Advisory Circular 21-16C, Radio Technical Commission for Aeronautics Document DO-160C, dated February 14, 1990, is canceled.
 3. **RELATED FEDERAL AVIATION REGULATIONS (FAR).** Federal Aviation Regulations, part 21.
 4. **BACKGROUND.** DO-160D defines a series of standard environmental test conditions (categories) and applicable test procedures for airborne equipment. The purpose of these tests is to provide a laboratory means of determining the performance characteristics of airborne equipment in environmental conditions representative of those which may be encountered in airborne operation of the equipment.
 5. **USE OF RTCA DOCUMENT NO. DO-160D.**
 - a. An applicant for a Technical Standard Order (TSO) authorization for airborne equipment may use the conditions and procedures prescribed in DO-160D in lieu of the corresponding conditions and procedures specified in a TSO if it is shown that:
 - (1) Conditions and procedures used are those prescribed in DO-160D.
 - (2) The substitute test procedures from DO-160D provides an equivalent level of safety.
 - (3) The applicant requests approval to deviate in accordance with the requirements of FAR Section 21.609.
 - b. An applicant for a Type Certificate or Supplemental Type Certificate may use DO-160D to show compliance with appropriate airworthiness requirements. DO-160D is an acceptable means, but not the only means, for any environmental qualification.
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6. AVAILABILITY OF RTCA DOCUMENT NO. DO-160D. Copies may be purchased from RTCA, Inc, 1140 Connecticut Ave., NW, Suite 1020, Washington, DC 20036.



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